

GTAD12-55 12V-55AH

DC SERIES-Deep Cycle Battery



Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	55AH	
Dimension	Length	228±2mm
	Width	138.5±2mm
	Container Height	210±2mm
	Total Height (with Terminal)	216±2mm
Approx Weight	Approx 15.3Kg	
Terminal	T6	
Container Material	ABS	
Rated Capacity	59AH/2.95A	(20hr, 1.80V/cell,25°C/77°F)
	55 AH/5.50A	(10hr, 1.75V/cell,25°C/77°F)
	48.3AH/9.65A	(5hr, 1.75V/cell,25°C/77°F)
	43.8 AH/14.6A	(3hr, 1.75V/cell,25°C/77°F)
	35.5 AH/35.5A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	660A (5s)	
Internal Resistance	Approx 7.6 mΩ	
Operating Temp.Range	Discharge : -15~50°C (5 122°F)	
	Charge : 0~40°C (32 104°F)	
	Storage : -15~40°C (5 104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 16.5 A.Voltage 14.6V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage 13.6V~13.7V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104 °F)	103%
	25°C (77 °F)	100%
	0°C (32 °F)	86%
Self Discharge	Global Power DC series batteries may be stored for up to 6 months at 25°C(77°F) and battery should be recharged before use. For higher temperatures the time interval will be shorter.	

Applications

- ◆ Uninterruptable Power Supply(UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ Solar Power System

Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	80.5	67.8	59.2	42.6	33.8	27.5	17.1	13.3	10.8	8.76	7.64	6.23	5.19	2.92
1.80V/cell	102.9	81.9	70.0	50.3	39.4	30.8	18.6	14.3	11.5	9.40	8.19	6.61	5.43	2.95
1.75V/cell	113.1	89.4	75.3	52.2	40.8	32.2	19.3	14.6	11.8	9.65	8.42	6.73	5.50	2.98
1.70V/cell	123.2	95.5	79.1	54.3	42.5	33.2	20.1	15.0	12.1	9.89	8.59	6.82	5.61	3.03
1.65V/cell	133.0	101.5	84.1	57.3	43.5	34.3	20.6	15.6	12.5	10.2	8.78	6.93	5.73	3.07
1.60V/cell	144.4	108.6	89.5	60.5	45.4	35.5	21.3	16.1	12.9	10.5	8.97	6.99	5.79	3.09

Constant Power Discharge (Watts) at 25 °C (77°F)

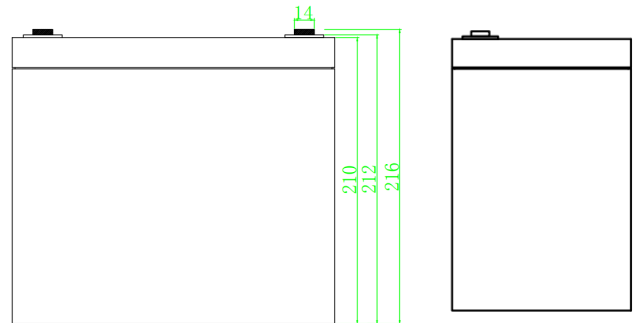
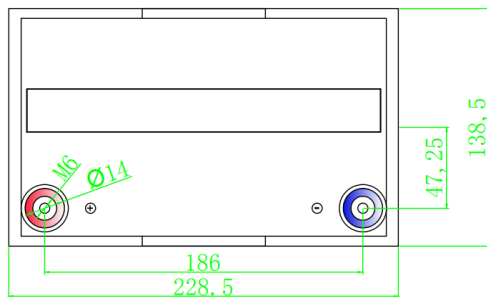
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	150.2	127.7	112.8	81.9	65.5	53.3	33.2	26.0	21.1	17.2	15.1	12.3	10.3	5.84
1.80V/cell	189.4	152.0	131.4	95.4	75.5	59.4	36.1	27.8	22.4	18.4	16.1	13.1	10.9	5.89
1.75V/cell	205.6	164.5	140.1	98.6	78.0	61.9	37.3	28.3	22.9	18.9	16.5	13.3	11.0	5.94
1.70V/cell	220.9	174.3	146.4	102.2	80.9	63.7	38.7	29.0	23.4	19.3	16.9	13.5	11.1	6.04
1.65V/cell	236.7	184.2	154.8	107.3	82.6	65.6	39.6	30.1	24.2	19.8	17.2	13.6	11.3	6.11
1.60V/cell	252.6	194.6	163.2	112.2	85.3	67.4	40.7	30.9	24.8	20.3	17.5	13.8	11.4	6.14

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

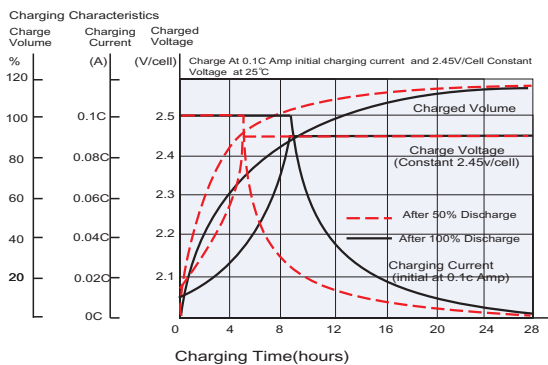
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Dimensions

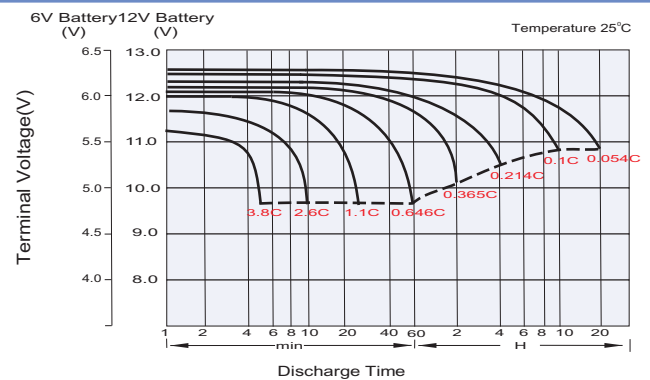
T6 Terminal
Unit: mm [inches]



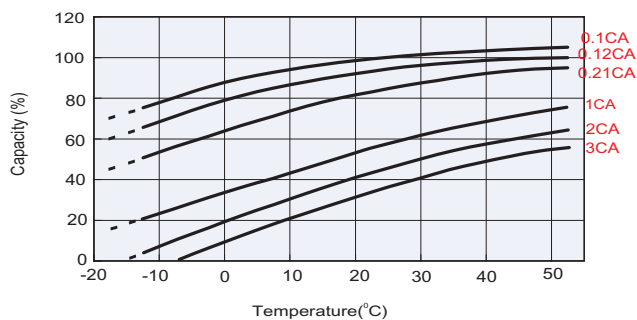
Charging Characteristics (cycle use)



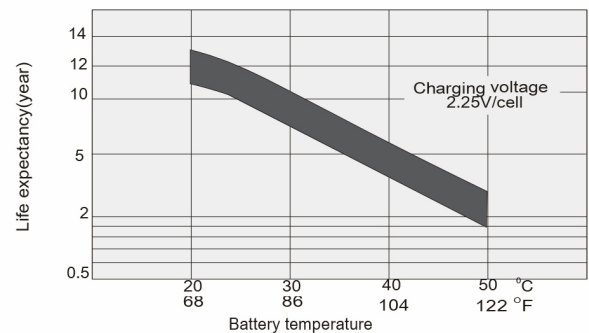
Discharge Characteristics



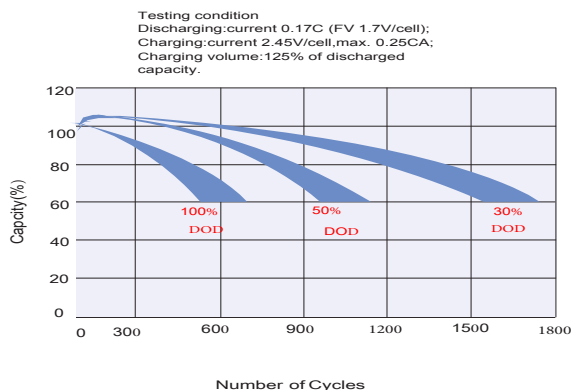
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

